

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

## C-A OPERATIONS PROCEDURES MANUAL

### ATTACHMENT

#### 4.120.6.d 6 O’Clock (PEER 7) Sweep Tests

C-A-OPM Procedures in which this Attachment is used.		
4.120.6		

#### Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
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Approved: *Signature on File* \_\_\_\_\_  
 Collider-Accelerator Department Chairman Date

V. Castillo

#### 4.120.6.d 6 O’Clock (PEER 7) Sweep Tests

### PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: \_\_\_\_\_ Checksum: \_\_\_\_\_

Division B Software Filename and Checksum: Title: \_\_\_\_\_ Checksum: \_\_\_\_\_

#### Initial testing complete:

Test Team Leader’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

Test Team Leader’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

#### Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

Test Team Leader’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

#### Test results reviewed by:

Safety Section Head’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

Safety Section Head’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

#### Test results accepted by Radiation Safety Committee:

RSC Member’s Name (Print): \_\_\_\_\_ Life Number: \_\_\_\_\_

RSC Member’s Name (Sign): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

## 1.1 Test for Sweep of Zone 5Z1

	<b>CLOSE</b>	Gates <b>5GS1-I/O, 5EL1, 5GE1, YGI1</b> and <b>5ED1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gates <b>5GS1-I/O, 5EL1, 5GE1, YGI1</b> and <b>5ED1</b> are	<b>CLOSED</b>
	<b>RESET</b>	Gates <b>5EL1</b> and <b>5ED1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gates <b>5EL1</b> and <b>5ED1</b> are	<b>RESET</b>
	<b>PLACE</b>	<b>Peer 7</b> in <b>Mode 16</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7</b> is in <b>Controlled Access</b>	<b>MODE 16</b>
	<b>ACTIVATE</b>	Check station <b>5CS1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>5CS1</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>5CS2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>5CS2</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>5CS3</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>5CS3</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>5CS4</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>5CS4</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>5CS5</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>5CS5</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>EXIT</b>	Gate <b>5GE1</b> with <b>Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees Zone <b>5Z1</b>	<b>SWEPT</b>

☐ Check for acceptance of test of Sweep of Zone 5Z1

## 1.2 Test for Sweep of Zone 6Z1

	<b>CLOSE</b>	Gates <b>6GE1, 6GE2</b> and <b>6MD1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gates <b>6GE1, 6GE2</b> and <b>6MD1</b>	<b>CLOSED</b>
	<b>RESET</b>	Gate <b>6MD1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gate <b>6MD1</b> is	<b>RESET</b>
	<b>PLACE</b>	<b>Peer 7</b> in <b>Mode 16</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7</b> is in <b>Controlled Access</b>	<b>MODE 16</b>
	<b>ACTIVATE</b>	Check station <b>6XCS1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS1</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6XCS2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS2</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6XCS3</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS3</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6XCS4</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS4</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>IF</b>	<b>Star Detector is in place:</b>	
	<b>ACTIVATE</b>	Check station <b>6XCS5</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS5</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6XCS6</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS6</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6XCS7</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS7</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>Otherwise</b>	Go directly to:	
	<b>ACTIVATE</b>	Check station <b>6XCS8</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6XCS8</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>EXIT</b>	Gate <b>6GE2</b> with <b>Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees Zone <b>6Z1</b>	<b>SWEPT</b>

☐ Check for acceptance of test of Sweep of Zone 6Z1

### 1.3 Test for Sweep of Zone 6Z2

	<b>CLOSE</b>	Gates <b>6ED1, XGI2, 6GE3, 6EL1, 6ED2</b> and <b>7GS1-I/O</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gates <b>6ED1, XGI2, 6GE3, 6EL1, 6ED2</b> and <b>7GS1-I/O</b> are	<b>CLOSED</b>
	<b>RESET</b>	Gate <b>6ED1, EL1</b> and <b>6ED2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Gates <b>6ED1, EL1</b> and <b>6ED2</b> are	<b>RESET</b>
	<b>PLACE</b>	<b>Peer 7</b> in <b>Mode 16</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peer 7</b> is in <b>Controlled Access</b>	<b>MODE 16</b>
	<b>ACTIVATE</b>	Check station <b>6CS6</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6CS6</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6CS5</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6CS5</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6CS3</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6CS3</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6CS4</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6CS4</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6CS2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6CS2</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>ACTIVATE</b>	Check station <b>6CS1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Check station <b>6CS1</b> indicator ( <b>Area Secured</b> )	<b>BLINKS ONCE</b>
	<b>EXIT</b>	Gate <b>6GE3</b> with <b>Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees Zone <b>6Z2</b>	<b>SWEPT</b>

☐ Check for acceptance of test of Sweep of Zone 6Z2

### 1.4 Test for loss of sweep in adjacent zones: 4Z2, 5Z1, with illegal opening of gate 5GS1-I

	<b>PLACE</b>	<b>Peers 7 &amp; 9</b> in <b>Mode 2</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peers 7</b> <input type="checkbox"/> & <b>9</b> <input type="checkbox"/> are in <b>Safe Access</b>	<b>MODE 2</b>
<input type="checkbox"/>	<b>VERIFY</b>	The warning lights and LED message: <b>Stop Call MCR for Access X-7400 Stop</b> on both sides of the gate are	<b>ON</b>
<input type="checkbox"/>	<b>VERIFY</b>	The warning light on both sides of <b>5GS1-O</b> indicate <b>Call MCR for crossover</b> <b>Amber</b>	<b>ON</b>
	<b>SWEEP</b>	<b>Zones 4Z2 &amp; 5Z1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Zones <b>4Z2</b> <input type="checkbox"/> & <b>5Z1</b> <input type="checkbox"/> are	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>5GS1</b> gatebox lights are:	
		<b>Area Secured (S11)</b> <b>Amber</b> <input type="checkbox"/>	<b>ON</b>
		<b>Area Secured (S10)</b> <b>Amber</b> <input type="checkbox"/>	<b>ON</b>
	<b>OPEN</b>	Gate <b>5GS1-I</b> without a <b>Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees Zone <b>4Z2</b> is	<b>NOT SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees Zone <b>5Z1</b> is	<b>NOT SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Peer 7</b> remains in	<b>MODE 2</b>
<input type="checkbox"/>	<b>VERIFY</b>	MCR sees <b>Peer 9</b> remains in	<b>MODE 2</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>5GS1</b> gatebox lights are:	
		<b>Area Secured (S11)</b> <b>Amber</b> <input type="checkbox"/>	<b>OFF</b>
		<b>Area Secured (S10)</b> <b>Amber</b> <input type="checkbox"/>	<b>OFF</b>
	<b>CLOSE</b>	Gate <b>5GS1-I</b>	

☐ Check for acceptance of test for loss of sweep in adjacent Zones: 4Z2, 5Z1, with illegal opening of gate 5GS1-I.

**1.5 Test for retention of sweep in adjacent Zones: 4Z2, 5Z1, with proper opening of gate 5GS1-I**

	<b>PLACE</b>	<b>Peers 7 &amp; 9 in Mode 16</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>Peers 7 <input type="checkbox"/> &amp; 9 <input type="checkbox"/> are in Controlled Access</b>	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	The warning lights and LED message: <b>Stop Call MCR for Access</b>	<b>ON</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>X-7400 Stop</b> on both sides of the gate <b>5GS1-I</b> are	
<input type="checkbox"/>	<b>VERIFY</b>	The warning light on both sides of <b>5GS1-O</b> indicate	
		<b>Call MCR for crossover      Amber</b>	<b>ON</b>
	<b>SWEEP</b>	<b>Zones 4Z2 &amp; 5Z1</b>	
<input type="checkbox"/>	<b>VERIFY</b>	Zones <b>4Z2 <input type="checkbox"/></b> & <b>5Z1 <input type="checkbox"/></b> are	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>5GS1</b> gatebox lights are:	
		<b>Area Secured (S11)      Amber <input type="checkbox"/></b>	<b>ON</b>
		<b>Area Secured (S10)      Amber <input type="checkbox"/></b>	<b>ON</b>
	<b>OPEN</b>	<b>Gate 5GS1-I with a Simultaneous Release</b>	
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees Zone <b>4Z2</b> is	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees Zone <b>5Z1</b> is	<b>SWEPT</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Peer 7</b> remains in	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>MCR</b> sees <b>Peer 9</b> remains in	<b>MODE 16</b>
<input type="checkbox"/>	<b>VERIFY</b>	<b>5GS1</b> gatebox lights are:	
		<b>Area Secured (S11)      Amber <input type="checkbox"/></b>	<b>ON</b>
		<b>Area Secured (S10)      Amber <input type="checkbox"/></b>	<b>ON</b>
	<b>CLOSE</b>	<b>Gate 5GS1-I</b>	

- ☐ **Check for acceptance of test for retention of sweep in adjacent Zones: 4Z2, 5Z1, with proper opening of gate 5GS1-I**

**END OF TEST PROCEDURE**

**TTL: Sign for completion of initial testing:** \_\_\_\_\_

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_

**TTL: Sign for completion of final testing:** \_\_\_\_\_

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_